Historical notes on Charles and Thomas Brittlebank, pioneer naturalists in the Werribee Gorge district, west of Melbourne

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Abstract

Early FNCV members, the brothers Charles and Thomas Brittlebank pursued their varied interests in natural history in the Werribee Gorge district in the late 19th and early 20th centuries. They compiled one of the first comprehensive bird lists for the area. Charles was a renowned artist and contributed illustrations of birds and their eggs, insects, fungi and mistletoes for pioneering works on thoise subjects by AJ Cambpell, JA Leach, Charles French, Daniel MeAlpine and himself. He published widely and was considered an authority on the evidence for glacial action in Werribee Gorge. Thomas was a skilled egg collector, bird observer, landscape artist and contributor to his brother's and AJ Campbell's studies. Together they helped to lay the foundations of natural history study in Victoria. (*The Victorian Vaturalist* 123 (5), 2006, 314–317)

Thomas (1865[?] 1948) and Charles Brittlebank (1863-1945) were pioneers in studying the natural history of the district immediately west of Melbourne, Victoria, They were brothers, born in the village of Winston in Derbyshire, England. In the 1870s, the family moved to the New Hebrides, and from there to Queensland, where their father Andrew and another son Louis died, probably of typhoid, The two younger sons and their mother Ellen later moved to Tasmania and then to Spring Vale (location unknown). Ellen bought a house and property, Dunbar, at Myrniong near Bacchus Marsh, on the northern side of Werribee Gorge, EE Pescott (1946). gave the date of arrival at Myrniong as 1893, but it was probably considerably earlier. A report in 1890 referred to an FNCV excursion to Werribee Gorge and stated that the Brittlebank brothers were present and the party started from Dunbar (Anon 1890). The previous owner of the property, William Dunbar, died in 1884 (Bacchus Marsh and District Historical Society 2003). When Charles married, he continued to live at Dunbar, while Thomas and his wife built a new house, Bonsall. The property was used for mixed farming until 1919 or 1920, when it was sold. Charles then worked for the Department of Agriculture. Thomas became the headmaster of the Migrant Training Centre at Elcho near Geelong, where migrants were trained in Australian agricultural methods, and was later involved in agricultural education at Warrnambool (Anon 1945; Pescott

1946; Anon 1948; Whittell 1954; Baechus Marsh and District Historical Society 2003; Marion Taylor, pers. comm.).

While they were living near Werribee Gorge, the brothers became interested in the natural history of the area. They must have been inspired by the beautiful setting of Dunbar, overlooking the rugged Werribee River valley, and with panoramic views of Melbourne, the Dandenong Ranges, the You Yangs and Mount Blackwood. Charles leaned more towards geology and Thomas towards ornithology, but they both had wide interests. Charles became the better known of the two, because of his work as Plant Pathologist and Biologist-in-charge of Science at the Department of Agriculture, his scientific publications in geology, botany, mycology, entomology and ornithology, and his illustrations in pioneering works in Australian natural history. However, Thomas was also a talented artist and naturalist (Pescott 1946; Anon 1948).

Charles and Thomas were active and popular members of the Field Naturalists' Club of Victoria. Naturally, they became particularly associated with Werribec Gorge, and many club excursions to the area were led by one or both of the brothers. Perhaps naturalists were also attracted by the friendly welcome, the late breakfasts and the sumptuous evening meals prepared by Mrs Brittlebank at Dunbar (Campbell 1891; Barnard 1894). In early excursions, members were attracted by the possibilities for bird-watching in the area.

A report published in The Victorian Naturalist in 1890 was devoted mainly to birds, and included a complete bird list (Anon 1890). The gorge was famous for its nesting Wedge-tailed Eagles. Campbell's book. Nests and Eggs of Australian Birds (1900), shows a photograph (facing page 10) of an intrepid climber standing in a rather casual attitude beside an eagle's nest in Werribce Gorge. The tree appears to be projecting outwards from a mountainside with the nest suspended over an alarming void. Later in the 1890s, the foeus gradually shifted to the geology of Werribee Gorge, which became famous for its evidence of glacial action and a former ice-age, partly because of work by George Sweet, Charles Brittlebank and Professor Edgeworth David. However, there was some confusion over priority for the observations of glacial rocks and a dispute over the interpretation of the geological studies (Officer and Balfour 1893; Sweet and Brittlebank 1893: Hall 1894).

Few illustrators have contributed so much to so many fields of natural history as Charles Brittlebank, He produced most of the plates of insects for five volumes of Charles French's A Handbook of the Destructive Jusects of Victoria (1891-1911); 14 plates for Volume I; 22 for Volume II; 20 for Volume III; 17 for Volume IV; and 10 for Volume V. He prepared the plates for Volume VI, but the book was not issued. He painted six plates for his own paper on the Harlequin Mistletoe (1908), and produced dozens of coloured plates and hundreds of microphotographs for books on fungi by Daniel McAlpine (e.g. MeAlpine 1899). Paintings of orehids by Charles Brittlebank were donated to Museum Victoria by his family. He is best known by bird-watehers for his detailed and exquisite watercolours of eggs in AJ Campbell's Nests and Eggs of Australian Birds (1900), the first work to delineate the eggs of more than 200 Australian species (pure-white eggs were not illustrated). He used many eggs from the collection of his brother Thomas as models. There is a letter in the AJ Campbell collection in Museum Vietoria, in which Charles Brittlebank agrees to paint 202 eggs for AJ Campbell for a fee

of £27 (McEvey 1966). Charles was described as an exacting artist. His work became world-famous for its 'beauty of delineation and accuracy of detail', achieved with the aid of a large magnifying lens (Pescott 1946).

Charles Brittlebank's paintings of birds were not as successful as his renditions of insects and eggs. In Allan MeEvey's opinion (1966), the posture and the birds' legs were 'often unconvincing'. However, the paintings are of considerable historieal interest. Charles Brittlebank provided several illustrations of insectivorous birds with explanatory notes for Charles French's work on insects: birds were delineated by him in eight plates in Volume III, 14 plates in Volume IV, and four plates in Volume V. A.J Campbell's book includes one of his bird paintings, a pair of Rose Robins at a lichen-eovered nest containing their pale-green spotted eggs (facing page 142); he provided five illustrations in JA Leach's An Australian Bird Book (1911); and there are four original colour plates of birds (petrels, Red-capped Robin, Flame Robin, Eastern Yellow Robin) in the collection of Museum Victoria. The plate of the petrels was used, either as a study or as the final plate, for the illustrations of these species in Leaeh's book (MeEvev 1966).

The Brittlebank brothers are especially known for their work in Werribee Gorge. However, they observed birds over a wide area west of Melbourne. In AJ Campbell's book, they contributed many records from Bacchus Marsh, Lerderderg Gorge, Yaloak, Mount Wallaec, the Werribee Plains, Mount Cottrell, Wyndham, Werribee and the mouth of the Werribee River. But perhaps their greatest contribution to local ornithological knowledge was a paper on the birds of Myrniong published in The Victorian Naturalist (Brittlebank 1899a). This paper, written by Charles, listed every bird species which he and Thomas had recorded in the district between 1893 and 1899; 158 species in all, 108 of them with breeding records. Several rarities, vagrants, and birds now declining or locally extinet were on the list, including Square-tailed Kite, Letter-winged Kite, Rainbow Lorikcet, Spangled Drongo, Cieadabird, Hooded Robin, Black-faced Monarch, White-browed and Grey-

crowned Babbler, Regent Honeyeater and Dollarbird, Lerderderg Gorge, McIton, Mount Blackwood, the Moorabool River and the northern Brisbanc Ranges formed the boundaries of the district covered in this paper. An area of woodland now known as Long Forest fell within these limits. It contains an isolated occurrence of Bull Mallee Eucalyptus behriana, unique south of the Great Divide. The mallee woodland is mentioned in the introductory paragraph of the paper, and Thomas Brittlebank visited the area (then known as Melton) at least once. His discovery of a nest of a White-fronted Chat there was the subject of a short note in The Victorian Naturalist (C Brittlebank Unfortunately, however, no specific locations were given for any of the birds on the Myrniong list.

Charles Brittlebank's versatility across several disciplines in natural history, and his talent with both pen and brush, were astonishing, and yet his work was never superficial. It was always supported by the most earcful observations and research, and demonstrated his patience and attention to detail. We can picture him alone, quietly working on his papers and paintings over endless hours, and yet this picture appears to be incomplete. He must have been a sociable person. He was well liked in the FNCV. An affectionate and generous friend, his home was always open and became the centre for Werribce Gorge excursions over many years. He always enjoyed sharing his knowledge (Pescott 1946). For his friend, Charles French, he prepared as a gift a series of drawings of beetles, commemorating every species that bore French's name. These covered seven large sheets of drawing paper (Pescott 1946). To balance his quieter pursuits, Charles Brittlebank was very active and possessed great stamina. EE Pescott, one of his obituarists, noted that he was an amateur boxer in his youth. Reports of Werribee Gorge excursions in the 1890s spoke of scrambling down the riverbed, scaling precipitous slopes, pushing through hilltop scrub, and negotiating huge stones, fallen masses of rock and thorny thickets. To traverse 16 kilometres took up to 10 hours of walking over an actual distance of 40-45 km. This was all

described as 'rather violent exercise' (Anon 1890; Barnard 1894). This difficult country was Charles' patch, and he knew every inch of it.

Because Thomas left little published work under his own name, he is a more shadowy historical figure than Charles. Like his brother, he was a talented artist. producing many landscape paintings (Marion Taylor, pers. comm.). His observational skills were at least the equal of Charles'. He was a partner, sometimes a silent one, in some of his brother's endeavours. Many of the eggs delineated in AJ Campbell's book and the records in Charles' paper on the birds of Myrniong originated with Thomas (T Brittlebank 1899; Campbell 1900). Like his brother, Thomas was at home in rugged Werribee Gorge, and took part in, and led, several FNCV excursions there (e.g. Hall 1894). He seemed to be the more adventurous of the two, perhaps because Charles' wife suffered from poor health (Marion Taylor, pers. comm.). In those days, all serious egg-collectors were during tree-climbers and travellers. Thomas took part in eggcollecting expeditions to remote parts of Australia (Marion Taylor, pers. comm.). and he was the first to describe and measure the eggs of the Little Kingfisher, from a nest he found in the Cape York district of Queensland (Brittlebank 1901). His eggcollection is now at Museum Victoria.

Thomas and Charles were buried side-byside in Bacchus Marsh (Maddingley) Cemetery, with their mother and their wives. From the grave-sites, the ridge above Werribee Gorge is visible in the distance.

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A record of the Common Dunnart Sminthopsis murina using artificial habitat

The Common Dunnart Sminthopsis murina inhabits mallec scrub, dry heath, dry forest and woodland within Victoria, mostly in the north and west of the state (Atlas of Victorian Wildlife). All areas where the species is found have sparse shrub and ground cover, but usually with a dense cover of ground litter (Menkhorst 1995). However, the species is no longer common and is now classed as vulnerable in Victoria. Records of the Common Dunnart exist close to Melbourne, particularly to the north east on dry slopes and ridges south of the Kinglake ranges, in the vicinity of Watsons Creek.



Fig. 1. Concrete paver used to produce nesting cavity.

In this district, the Watsons Creck Nature Conservation Link is made up of remnant habitat areas along Watsons Creek and several Crown Conservation Reserves, which join the Kinglake ranges to the north and the Yarra Valley to the south. Within this link, One Tree Hill Reserve is the largest area of reserved crown land and provides important habitat for several rare and threatened species, including the Powerful Owl *Ninox strenua*, Brush-tailed Phascogale *Phascogale tapoatafa* and Common Dunnart.

As part of a habitat enhancement program, RMIT University, in conjunction with Parks Victoria, positioned forty concrete pavers on several slopes in Dry Grassy Woodland at One Tree Hill, in habitat that was considered typical for the Common Dunnart. Each paver measured 380 mm by 380 mm and had a thickness of 45 mm (Fig. 1). The forty pavers were layed between October 2003 and March 2004. They were positioned in four lines of ten, with about ten metres between pavers. A nesting cavity was excavated under each block and dry grass was provided for nesting material.